1. An anti-tumor pharmaceutical composition comprising a N-vanillyl fatty acid amide of formula (1):

wherein -CO-R group represents a saturated or unsaturated fatty acid residue containing from 14 to 32 carbon atoms.

2. An anti-melanoma pharmaceutical composition comprising a N-vanillyl fatty acid amide of formula (1):

$$H_3CO$$
 $CH_2NHCO-R$
(1)

wherein -CO-R group represents a saturated or unsaturated fatty acid residue containing from 14 to 32 carbon atoms.

- 3. The pharmaceutical composition according to claims 1 or 2 wherein the CO-R group is a member selected from the group consisting of saturated fatty acid residues containing from 14 to 32 carbon atoms.
- The pharmaceutical composition according to claim 3 wherein the -CO-R group is a member selected from the group consisting of myristic acid residue (C14), palmitic acid residue (C16) and stearic acid residue (C18).

- 5. The pharmaceutical composition according to claims 1 or 2 wherein the CO-R group is a member selected from the group consisting of unsaturated fatty acid residues containing from 14 to 32 carbon atoms.
- 6. The pharmaceutical composition according to claim 5 wherein the -CO-R group is a member selected from the group consisting of unsaturated fatty acid residues having from 1 to 3 double bonds and containing 18 carbon atoms and unsaturated fatty acid residues having 4 or 5 double bonds and containing 20 carbon atoms.
- 7. The pharmaceutical composition according to claim 6 wherein the -CO-R group is a member selected from the group consisting of oleic acid residue (C18:1), ricinoleic acid residue (C18:1), linoleic acid residue (C18:2), linolenic acid residue (C18:3) and eleostearic acid residue (C18:3).
- 8. The pharmaceutical composition according to claim 6 wherein the -CO-R group is a member selected from the group consisting of arachidonic acid residue (C20:4) and eicosapentaenoic acid residue (C20:5).
- 9. The pharmaceutical composition according to claim 5 wherein the -CO-R group is a member selected from the group consisting of unsaturated fatty acid residues having four or more double bonds and containing 22, 24, 26, 28 or 32 carbon atoms.
- 10. The pharmaceutical composition according to claim 9, wherein the -CO-R group is 4,7,10,13,16,19-docosahexaenoic acid residue (C22:6).
- 11. A method for the treatment of tumor comprising administering a N-vanillyl fatty acid amide of formula (1):

$$H_3C0$$
 $H_2NHCO-R$
(1)

wherein -CO-R group represents a saturated or unsaturated fatty acid residue containing from 14 to 32 carbon atoms.

- 12. The method according to claim 11 wherein the tumor is melanoma or leukemia.
- 13. Use of a N-vanillyl fatty acid amide of formula (1) in the manufacture of a medicament for the treatment of tumor:

$$H_3CO$$
 $H_2NHCO-R$
(1)

wherein -CO-R group represents a saturated or unsaturated fatty acid residue containing from 14 to 32 carbon atoms.

14. The use according to claim 13 wherein the tumor is melanoma or leukemia.